GOVERNMENT OF ANDHRA PRADESH
ABSTRACT

Animal Husbandry, Dairy Development & Fisheries Department – The Andhra Pradesh Milk Procurement (Protection of Farmers) and Enforcement of Safety of Milk Standards Rules, 2023 – Notification – Orders – Issued.

ANIMAL HUSBANDRY, DAIRY DEVELOPMENT & FISHERIES (AH.III) DEPARTMENT

G.O.Ms.No.02 **Dated:10.01.2024**

Read the Following:-

1. The Andhra Pradesh Milk Procurement (Protection of Farmers) and Enforcement of Safety of Milk Standards Act 2023 (Act No.17 of 2023).published in Part IV-B Extraordinary Gazette vide No.17, dated: 01.05.2023
2. G.O.Ms.No.26, AHDD&F (AH.I) Department, Dt: 01.06.2023.
3. From the Director, Animal Husbandry, AP., Vijayawada, Lr.No.AHF02-COOR0NINT/1/2022-HRD(U)-DAH, Dt:16.05.2023, dated 13.09.2023 & Dated:04.12.2023.

** * **

ORDER:

The following Notification will be published in an Extra-ordinary Issue of the Andhra Pradesh Gazette, dated:11.01.2024.

NOTIFICATION

In exercise of the powers conferred by sub-section (1) of section 33 of the Andhra Pradesh Milk Procurement (Protection of Farmers) and Enforcement of Safety of Milk Standards Act, 2023 (Act No.17 of 2023), Government hereby make the Andhra Pradesh Milk Procurement (Protection of Farmers) and Enforcement of Safety of Milk Standards Rules, 2023 which are appended to this Notification.

(BY ORDER AND IN THE NAME OF THE GOVERNOR OF ANDHRA PRADESH)

GOPAL KRISHNA DWIVEDI
SPECIAL CHIEF SECRETARY TO GOVERNMENT (FAC)

To
The Commissioner, Printing, Stationery and Stores Purchase, A.P., Vijayawada
-with a request to supply 100 copies of Gazette to this Department.
The Director, Animal Husbandry Department, Andhra Pradesh, Vijayawada.
Copy to:
All the Departments of A.P. Secretariat.
All the Collectors & District Magistrates.
All Heads of the Departments in the State.
P.S. to Secretary to the Governor, Rajbhawan, Vijayawada.
P.S. to Special Chief Secretary to C.M.
OSD to Minister(AHDD&F).
P.S. to Special Chief Secretary to Government, AHDD&F Department.
P.S. to Secretary to State Legislature, APLA,
P.S. to Secretary to State Legislature, APLC.
The Law(E) Department.
The Finance (FMU-A&C,AHDDF,CS) Department.
The G.A.(Cabinet) Department.
SF/SC.

//FORWARDED::BY::ORDER//

SECTION OFFICER

(G.O.Ms.No.02, AHDD&F(AH.III) Department, Dated:10.01.2024)

CHAPTER-I

1. Short title, extent and commencement:-

i. These rules may be called The Andhra Pradesh Milk Procurement (protection of Farmers) and Enforcement of Safety of Milk Standard Rules, 2023.

ii. They shall extend to the whole of the State of Andhra Pradesh.

iii. They shall come into force on the date of their publication in the Official Gazette.

2. Definitions

(i) **Reference sample or any such sample by whatever name it is known** means a sample used for testing the Milk Analyzer and the sample is approved by the Centre for Analysis and Learning in Livestock and Food laboratory (CALF) of NDDB Anand or any other approved laboratory for this purpose.

(ii) **Control Sample or any such sample by whatever name it is known** means a sample used for testing the Milk Analyzer and the sample is approved by the Centre for Analysis and Learning in Livestock and Food laboratory (CALF) of NDDB, Anand or any approved laboratory for this purpose.

(iii) Referral/Approval Laboratory means a Laboratory which is notified for the purpose of certification of control/Referral samples and also the lab to which the milk samples are sent for the purpose of determination of quality parameters of Milk. CALF laboratory of NDDB, Anand, Gujarat & APDDCF laboratory, Pulivendula, YSR Kadapa District of Andhra Pradesh etc. shall be notified as Referral Labs.

(iv) **Approved** means approved by Govt. of India or Govt. of a State.

(v) **Dairy** means any entity involved in procurement of milk and includes Cooperative Milk unions / MACS unions / Private Dairies / Societies / Federations / Unions registered under the Companies Act or other milk procurement centres.

Note: Words and expressions used herein and not defined, but defined in The Andhra Pradesh Milk Procurement (protection of Farmers) and Enforcement of Safety of Milk Standard Act, 2023 shall have the same meaning assigned to them in that Act.

Chapter – II
Licensing of Milk Analyzer

3. Standard Milk Analyzer: The Standard Milk Analyzer is the milk analyzer manufactured or used for the purpose of determining the quality parameters like fat, SNF and gives results of these parameters within the tolerance range of +/- 0.2 of the readings obtained for the same sample by using principle methods like Gerber/Rose Gottlieb for fat content determination and Lactometer for determining SNF **or** using Reference Milk Analyzer **or** Reference /Control sample method **or** results obtained for the same sample by the approved laboratory.

4. Licensing of Milk Analyzer:

(a) The Dairies shall purchase the Milk Analyzers only from the Manufacturers/Dealers who have got valid license from the Milk Commissioner for the supply of Milk Analyzers in Andhra Pradesh State.

(b) The user of Milk Analyzers shall apply for the license to the authorized officer in the prescribed Form No. I and on payment of Rs.1,000/- towards fees for each of the milk analyzer for 1 year which shall be auto renewed upon payment of Rs.1,000/- for each of the milk analyzer for subsequent year/years. Every user of milk analyzer shall apply within 30 days from the date of publication of these Rules in the official Gazette. After submission of application by the person in charge of the milk collection centre at the RBK, the application shall be forwarded in online to Milk Inspector concerned for verification of the make and model of the milk analyzer as well as for cross checking of

the serial number of the Milk analyzer before forwarding of the application to the authorized officer for issue of license.

5. The authorized officer shall issue license to user of Milk Analyzer in Form No. II and it is responsibility of the user of Milk Analyzer to adhere to the specifications of the OEM while using the Milk Analyzer. The Milk Analyzer users shall purchase standard milk analyzers.

6. The Dairies shall adhere to the internal quality control protocols for maintenance and calibration of milk analyzers and shall inform the protocols being followed by them to the Milk Commissioner and the Milk Commissioner may prescribe separate guidelines for ensuring the effective implementation of the Act and Rules in case necessary.

7. Licensing of manufacturer/dealer of Milk Analyzer:
Every manufacturer/ dealer of milk analyzer shall make an application in Form No. III within the period as may be notified by the Milk Commissioner from the date of publication of this Rules in the official Gazette for the issue of license to the Milk Commissioner or any authorized officer to operate anywhere in the state on payment of Rs.2,00,000/- towards fees for two years which shall be auto renewed upon payment of Rs.2,00,000/- for two (2) years and Milk Commissioner or any authorized officer may issue license in Form No. IV.

8. Suspension and cancellation of license: **(i)** The Milk Commissioner or such other officer authorized by him on his behalf may, if he has any reasonable cause to believe that the holder of any license issued, renewed under the Act has made any statement in, or in relation to, any application for the issue, renewal or continuance of the license, which is incorrect or false in any material particular or has contravened any law, or any provision of the Act or any Rule or order made there under, suspend such license in Form-V, pending the completion of any enquiry against the holder of such license.

Provided no such license shall be suspended unless the holder there of has been given an opportunity of showing cause against the proposed Act in Form No VI. The license holder shall reply to the show cause notice within 10 days from the date of issue of show cause notice. If the license holder fail to reply to show cause notice within stipulated time of ten (10) days, the license is deemed to be suspended.

Provided further where the enquiry is given to this sub rule is not completed within the period of 3 months from the date of suspension of license, such suspension shall, on expiry of period of aforesaid stand vacated.

(ii) The Milk Commissioner or such authorized officer, if he is satisfied, after making such enquiry as he may think fit, that the holder of a license has made a false or incorrect statement of the nature referred to a sub rule or has contravened any law or order cancel such license.

Provided no such license shall be cancelled unless the holder of such license has been given a reasonable opportunity of showing cause against the proposed action. The license holder shall reply to the show cause notice within 10 days from the date of issue of show cause notice. If the license holder fail to reply to show cause notice within stipulated time of ten (10) days, the license is deemed to be cancelled.

Chapter – III
Verification & Calibration

9. Verification of Milk Analyzer

(i) Every Milk analyzer shall be presented within 30 days after obtaining the license by applying in Form VII and payment of the prescribed fee. The user shall present the Milk Analyzer for verification at the office of the Milk Inspector in whose jurisdiction such procurement takes place. The verification of milk analyzer may be carried out by using any of the methods listed below: -

(a) Gerber/Rose Gottlieb for fat content determination and Lacto meter for SNF determination (As per procedure laid down in FSSAI Manual-FSSAI 01.024:2022 in Annexure -II, III & IV) **or**

(b) Reference or Control sample

The Reference sample / Control sample shall be certified by the Centre for Analysis and Learning and livestock and food (CALF) of NDDB Anand or Laboratory recognized by the Govt. of Andhra Pradesh for the purpose of certifying the Reference / Control samples (Separate guidelines/ regulations will be issued regarding the usage of Reference / Control sample at a later point of time).

or

(c) Reference milk analyzer of the Milk Inspector (Annexure -VI)

or

(d). Analysis of Sample at Referral/Approved Laboratory:

The Milk Inspector for the purpose of ascertaining the accuracy of the Milk Analyzer used by the user may lift the sample for testing by Referral/Approved laboratory and before lifting the samples, the same sample shall be used for obtaining the quality parameters of the milk by the milk analyzer used by the user. The procedure prescribed in the FSSAI Act shall be followed for lifting the samples for analysis by the Referral/Approved laboratories.

(ii) The fee for verification shall be Rs.500/-

(iii) The periodicity of verification shall be 12 months or earlier if considered necessary by the Government.

(iv) Provided if the milk analyzer is presented to the Milk Inspector for re-verification after the expiry of validity of certificate, additional fee of Rs. 200 shall be payable for every month of the year or part thereof.

(iv) (a) Every person using any Milk Analyzer in procurement of Milk shall present such Milk Analyzer on or before the date on which the verification falls due for re-verification at the office of the Milk Inspector in whose jurisdiction such procurement takes place or such other place as the Milk Inspector may specify in this behalf.

(b) Every Dairy shall use only standard milk analyzer for procurement of milk.

(v) For verification of the Milk Analyzer, the user shall provide such facilities as may be specified by the Milk Inspector.

(vi) Every Milk Analyzer presented for verification shall be complete in itself.

(vii) Every Milk Analyzer shall be verified in clean condition and if necessary the Milk Inspector shall require the owner or user to make such arrangements for the purpose.

(viii) The verified Milk Analyzer may be used elsewhere within the state than the place at which it is verified provided the milk analyzer shall be properly calibrated before being put in to use at a place other than the place of verification.

(ix) The user of milk analyzer shall be issued a Verification Certificate after the milk inspector is satisfied with the performance of the milk analyzer in the Form No. VIII.

10. Certificate of verification to be exhibited: the person to whom a certificate of verification is issued shall exhibit the same in a conspicuous place where the Milk Analyzer is used for transaction provided if there is no place to exhibit the certificate of verification at the place of procurement, certificate shall be carried with the person in-charge of the Milk procurement centre and shall be produced on demand. The Verification Certificate shall have a QR code and the same QR code/ Holograms shall be affixed on the Milk Analyzer.

11. Calibration: The Dairy shall maintain the calibration details manually and also upload the calibration details immediately after the calibration is carried out by the authorized personnel in the portal designed for this purpose by the Milk Commissioner.

12. The Milk Inspector at the time of inspection of the dairies has any suspicion about quality of the milk with regard to adulteration/ contamination of milk, he shall make a requisition to the food safety authority in the proforma given in the Form No. IX.

Chapter – IV
Offenses & Penalties

13. Maintenance & Cleaning of Milk Analyzer: The Milk Procurement Centre shall maintain the Milk Analyzer as per the manual supplied by the manufacturer and follow the cleaning cycle prescribed by the manufacturer of the Milk Analyzer. While cleaning the Milk Analyzer, Dairy shall use the standard quality of the cleaning liquids. The cleaning cycle shall be followed before commencement of the milk procurement and completion of milk procurement for each session in a day. The record to the effect that cleaning cycle has been followed shall be maintained by the Dairy and shall be produced at the time of inspection by the Milk Inspector. Whoever fails to follow the cleaning cycle as prescribed above shall be punished with a fine of Rs.1,000/- and for the second and subsequent offense shall be punished with a fine of Rs. 5,000/-.

14. The dairies shall upload to the portal designed for this purpose by the Milk Commissioner the name and identity of the person who is authorized to calibrate the milk analyzers.

15. The Dairy shall maintain the Registers and Records as notified communicated by the Milk Commissioner.

16. Disposal of seized Milk Analyzers or Goods or documents: Any unverified/Non-Standard Milk Analyzer which is not the subject proceedings of any court shall be returned to the person from whom such Milk Analyzer was seized, if that person gets the same verified & stamped within 15 days of return on payment of Rs.1,000/- towards fee for undertaking re-verification, failing which the analyzer shall be forfeited to the Government.

17. Any Milk Analyzer or document or thing or goods seized obtained which is to be subject proceedings in a court shall be produced by the Milk Inspector before the court and shall after conclusion of proceedings, be taken possession of by the Milk Inspector & dealt in accordance with the orders of the court provided in the absence of orders of court, the Milk Analyzer or document or thing or goods shall be dealt with as the Milk Commissioner may by special or General orders may direct & the material thereof shall be sold and the proceeds of such sale shall be credited to the State Government.

18. If any goods seized under Act or the Rules are subject to speedy or natural decay, the Milk Inspector shall have the goods weighed or measured on a verified weighing or measuring instrument available at the site or nearest place of offence and enter the actual weight or measure of the goods in Form XIII specified by the Milk Commissioner for the purpose and shall obtain the signature of the person in-charge of the Dairy. The goods shall be returned to the person in-charge of the Dairy from whom the goods are seized. Provided if the person in-charge refuses to sign the form, the Milk Inspector shall obtain the signature of not less than two persons present at the time of such refusal by the person in charge of the Dairy.

19. Cognizance of offense: Notwithstanding anything contained in the Code of Criminal Procedure 1973:

a. No court shall take cognizance of offense punishable under the Act and the Rules made there under, except upon a complaint, in writing, made by
   i. The Milk Commissioner
   ii. Any Milk Inspector authorized by the Milk Commissioner in this behalf.
   iii. Any person aggrieved

b. No court inferior to that of a Metropolitan Magistrate or Judicial Magistrate of the first class shall try any offense punishable under the Act and the Rules made thereunder.

20. Notwithstanding anything contained in the Code Of Criminal Procedure 1973, an offense punishable under the Act and Rules may be tried summarily.

21. Procedure for compounding of offense: the Milk Commissioner may issue guidelines prescribing the procedure for compounding of offenses.

Chapter – V
Miscellaneous

22. The Milk Commissioner shall develop the online platform for automation of issue of licenses/ daily transactions / uploading of data by dairies / updation of rate charts/ other required procedures.

23. The Milk Commissioner shall purchase and supply Reference milk analyzers with sealing facility along with the Gerber's test equipment /reagents/ chemicals/ Reference samples/ Control samples / Ice boxes/ measuring equipment calibrated by the NABL accredited laboratories.

24. Training of personnel: The Authorized officers, Milk Inspectors and other staff involved in enforcement of this Act shall be trained for effective enforcement of Act and Rules by the Milk Commissioner Govt. of Andhra Pradesh as per the curriculum designed by the Milk Commissioner.

25. The Milk Commissioner may issue regulations for effective implementation of the provisions of the Act & Rules.

26. Fee for Appeal: Every appeal referred to in section 32 of the Act shall be made on payment of fee of Rs.500/- in Form no. XIV.

27. Collection of Fee & Penalties – The following Head of accounts have been opened for collection of Fee & Penalties under the AP Milk Procurement (Protection of Farmers) and Enforcement of Safety of Milk Standards Act, 2023.

(i) 0404
-00-M.H.
101-Safety Standards for milk procurement
00-
(04)-The AP Milk Procurement (Protection of Farmers) and Enforcement of Milk Standards Act, 2023,
001-Fees under the AP Milk Procurement (Protection of Farmers) and Enforcement of Milk Standards Act, 2023
000.

(ii) 0404-
00-M.H.
101-Safety Standards for milk procurement
00-
(04)-The AP Milk Procurement (Protection of Farmers) and Enforcement of Milk Standards Act, 2023,
002-Penalties under the AP Milk Procurement (Protection of Farmers) and Enforcement of Milk Standards Act, 2023
000.

28 . Fixation and Revision of Fees/Charges/Penalties/Procedures

1. The charges fixed under the Act and Rules for providing various services like issuance of License, any other services, procedures and penalties imposed for various offenses are fixed for the first time under these rules.
2. The charges fixed & specified in the Act and Rules are not fixed but revisable from time to time.

3. The Milk Commissioner shall have the powers to revise any Fee/ charge/procedures/penalty collectable by Milk Commissioner.
4. As and when need for revision of any fee/charge/ procedures /penalty arises, the Milk Commissioner shall prepare and submit such proposal to the Special Chief Secretary/ Principal Secretary/Secretary to Government, AH,DD&F Department, Government of Andhra Pradesh for approval.
5. Upon approval of Special Chief Secretary/ Principal Secretary/ Secretary to Government, AHDD&F Department, Government of Andhra Pradesh, executive orders shall be issued by the Milk Commissioner to this effect. The revised rates/procedures will be effective from the date of issuance of executive orders or date of effect mentioned in such executive orders.

You are requested to acknowledge the receipt of this show cause notice.

Signature of Authorized officer with Seal

Annexure- I

Calibration of Reference Analyzer

The Reference Analyzer shall be calibrated basing on the principles and methods outlined below and these analyzers are tested for repeatability within a tolerance of +/- 0.1 of the readings obtained during testing by these methods. Further, these analyzers shall be tested for two ranges namely low fat and high fat milk.

The reference analyzer shall be calibrated before they are used for verification or for inspection.

A Milk Analyzer which has a provision for sealing is used as Reference Milk Analyzer.

Gerber/Rose Gottlieb for fat content determination and Lacto meter for determining SNF or Reference /Control sample method or results obtained for the same sample by the approved laboratory.

Annexure- II (Gerber Method)

Determination of Fat Content in Milk [FSSAI 01.024:2022]

Scope
This method is for the determination of fat in milk.

Caution

Follow all safety procedures while handling and disposing solutions. Wear laboratory apron, shoes, safety goggles and mask while working with chemicals. Perform work in fume hood while working with solvents. Refer to MSDS (Material Safety Data Sheets) for specific information.

1. Concentrated sulfuric acid: Concentrated sulfuric acid is extremely corrosive and can cause serious burns when not handled properly. It reacts violently with water with evolution of heat; can react with organic materials explosively. Do not mix with hydrochloric acid. Good general ventilation should be provided to keep vapour and mist concentrations below the exposure limits.
2. Amyl alcohol: It is a highly flammable liquid. Keep away from heat/sparks/open flames/hot surfaces. Perform all operations under a fume hood.

Principle
The Gerber method is suitable as a routine or screening test. It is an empirical method and reproducible results can be obtained if procedure is followed correctly. The milk is mixed with sulfuric acid and iso-amyl alcohol in a special Gerber tube, permitting dissolution of the protein and release of fat. The tube is centrifuged and the fat rising into the calibrated part of the tube is measured as a percentage of the fat content of the milk sample. This method can be used for routine purposes.

Apparatus/Instruments

1. Gerber butyrometer: 6, 8 and 10 percent (ISI marked).
2. Pipette: 10.75 ± 0.03 mL for milk at 27°C.
3. Automatic measure or tilt measure for dispensing Gerber sulphuric-acid: 10 ± 0.25 mL at 27° C.
4. Automatic measure or tilt measure for dispensing iso-amyl alcohol: 1± 0.05 mL at 27° C.
5. Lock stoppers for butyrometer.
6. Lock stopper key.
7. Water-bath: The water-bath shall be made of a suitable material (e.g. stainless steel). It shall be capable of being maintained at 65±2 ^{O}C and shall be of sufficient depth as to support the butyrometer in vertical position with their scale completely immersed. The bath shall be fitted with horizontal perforated plates to hold the butyrometer and shall also carry a suitable thermometer.

8. Gerber Centrifuge: The centrifuge may be hand-driven or electric driven. The centrifuge shall be capable of producing within 2 min when fully loaded, a relative centrifugal acceleration of 350 ± 50 gn at the outer end of the butyrometer stopper. This acceleration is produced by centrifuges with the following effective radius (horizontal distance between the centre of the centrifuge spindle and the outer end of the butyrometer stopper) if operated at the speed indicated against each:

Effective Radius(mm)	Revolution Per Min(±70rev/min)
240	1140
245	1130
250	1120
255	1110
260	1100
265	1090

270	1080
275	1070
300	1020
325	980

Note: The relative centrifugal acceleration (g_n) produced in a centrifuge is given by the following formula:

$1.12 \times 10^{-6} r n^2$
where
r = effective horizontal radius in mm, and
n = speed in revolutions per min

Materials and reagents

1. Concentrated Sulphuric acid (Approximately 36.8 N).
2. Isoamyl alcohol (furfural free). It should have density between0.807 to 0.809 g/mL at 27°C

Preparation of Reagents

1. Gerber Sulphuric acid: Take required volume of water in a Pyrex flask (generally 100 mL of water is required for 900 mL of concentrated sulphuric acid) kept in a basin of ice-cold water. Carefully add the commercial sulphuric acid in small quantities at a time keeping the container sufficiently cold and mix gently.

Observe the following precautions while preparing Gerber's acid:

- Sulfuric acid is very corrosive. Handle it with care.
- Add acid to water. Add small quantities of acid to water at a time and cool the mixture by stirring. Never add water to acid.
- Use heat resistant flask for dilutions.

2. After cooling the flasks, check the specific gravity of Gerber acid with hydrometer and if necessary, adjust the Gerber acid to the correct specific gravity with addition of water or acid taking same precautions as before till specific gravity is in the range of 1.807 to 1.812 g/mL at 27°C(or 1.815 to1.820 g/mL at 20°C . Store the prepared acid in a glass stoppered bottle to avoid absorption of water.

Method of analysis

1. Transfer 10 mL of sulphuric acid into a butyrometer tube, preferably by use of an automatic dispenser, without wetting the neck of the tube.
2. Mix the milk sample gently but thoroughly and fill the 10.75 ml milk pipette above the graduation line.
3. Wipe the outside of the pipette and allow the milk level to fall so that the top of meniscus is level with the mark.
4. Run the milk into the butyrometer tube along the side wall without wetting the neck, leave to drain for three sec and touch the pipette's tip once against the base of the neck of the butyrometer tube.
5. Add 1 mL of amyl alcohol, close with a lock stopper, shake until homogeneous, inverting it for complete admixture of the acid.
6. Keep in water bath at 65±2 °C for at least 3 min and not less than 10min taking care to have casein particles if any to dissolve fully, and centrifuge for 5 mins at 1100 rpm (approximately 300 g).
7. The tubes should be put in centrifuge, so as to conform to radial symmetry, and as evenly spaced as possible, in order to protect bearings of the centrifuge.
8. Allow the centrifuge to come to rest, remove the butyrometer tubes and place in water bath at 65±2 °C for at least 3 min and not less than10 min.
9. Read the percentage of fat after adjusting the height in the tube as necessary by movements of the lock stopper with the key.
10. Note the scale reading corresponding to the lowest point of the fat meniscus and the surface of separation of the fat and acid.
11. When readings are being taken, hold the butyrometer with the graduated portion vertical, keep the point being read in level with the eye, and then read the butyrometer to the nearest half of the smallest scale division.

In homogenised milk, fat separates with more difficulty and centrifuging more than once may be required. Below procedure should be followed for homogenized milk:

1. In case of homogenized milk, obtain the second value of fat content by repeating centrifugation. If the second value does not exceed the first value by more than half a smallest scale division of the butyrometer, the second value shall be recorded as the fat content of the milk.
2. If the second value exceeds the first value by more than half a smallest scale division, repeat the centrifugation and obtain a third value for the fat content. If the third value does not exceed the second value by more than half a smallest scale division, the third value shall be recorded as the fat content of the milk.
3. If the third value exceeds the second value by more than half a smallest scale division, repeat the centrifugation and obtain fourth value for the fat content. The fourth value shall be recorded as the fat content of the milk, but if this value exceeds the third value by more than half a smallest scale division, it should be regarded as of doubtful accuracy.
4. If even after the several entrifuging's, the fat is turbid or dark in colour or if there is white or black material at the bottom of the fat column the value for fat content would not be accurate.
5. Holding the tubes too long at 65 °C or above, results in esterification of the amyl alcohol with a consequent increase in the volume of the fat layer.
6. In case of old samples, if necessary, the concentration of sulphuric acid may be increased from 90-91% to 92-93% to felicitate better dissolution.

Note: The butyrometer must always be emptied without delay and the highly acidic waste disposed of appropriately. The tubes may be cleaned with chromic acid.

Annexure- III (Rose-Gottlieb Method)

Determination of Fat Content in Milk By Rose-Gottlieb Method [FSSAI 01.024:2022]

Scope
This method is for the determination of fat in milk.

Caution
Follow all safety procedures while handling and disposing solutions. Wear laboratory apron, shoes, safety goggles and mask while working with chemicals. Perform work in fume hood while working with solvents. Refer to MSDS (Material Safety Data Sheets) for specific information.

1. Ammonia solution: Do not breathe vapour or mist. Use only with adequate ventilation. Although ammonia is not flammable, it may ignite and burn with explosive force. It reacts violently with halogens (such as fluorine, bromine, and chlorine), acids (such as hydrochloric acid, hydrogen fluoride, hydrogen bromide).
2. Ethyl alcohol: Extremely flammable. Use effective fume removal device when heating or evaporating. Keep away from heat, sparks and open flame; avoid breathing vapours.
3. Diethyl ether: Store protected from light. It is extremely flammable and can react explosively when in contact with Cl2, O3, LiAlH4 or strong oxidizing agents.
4. Petroleum ether: Extremely flammable. Avoid breathing fumes. Perform all operations in a fume hood.

Principle
Rose-Gottlieb Method is a gravimetric method in which fat globule membrane of milk fat globules is ruptured by addition of ammonia to milk sample to liberate the fat. The liberated fat is extracted using combination of solvents viz., diethyl ether and petroleum ether. The solvents are evaporated and obtained fat is dried and weighed. This method is considered suitable for reference purposes. Strict adherence to details is essential in order to obtain reliable results.

Apparatus/Instruments
1. Mojonnier fat extraction flask or any other suitable extraction tube (as per IS specification).
2. Cork or stopper of synthetic rubber unaffected by usual fat solvents.
3. 100 ml. flat bottom flask with G/G joint or stainless steel or aluminium dishes of 5.5 cm height and 9cm diameter or glass bowl.
4. Hot air oven (forced air type), capable of being controlled at 102±2 °C.

Materials and reagents
1. Ammonia solution (Sp. Gr. 0.91).
2. Ethyl alcohol (95%).
3. Diethyl ether, peroxide-free.
4. Petroleum ether, boiling range 40-60 °C.

Method of analysis
1. Weigh accurately about 10 g of sample (liquid milk) in beaker.
2. Add 1.25ml of ammonia sp. gr. 0.91 (or an equivalent volume of a more concentrated ammonia solution may be used), mix and shake thoroughly.
3. Transfer the content to extraction tubes.
4. Add 10 ml ethyl alcohol and mix again.
5. Add 25 ml of diethyl ether (peroxide free) stopper and shake vigorously for about a min
6. Then add 25 ml petroleum ether (boiling range 40-60 °C and shake again vigorously for about half a min.
7. Let it stand until the upper ethereal layer has separated completely and is clear (alternatively use low r.p.m. Mojonnier centrifuge).
8. If there is a tendency to form emulsion, a little alcohol may be added to help separation of the layers.

9. Decant off the clear ethereal layer into a suitable vessel (flask, glass bowl, aluminium dish, etc.). Wash the delivery end of the extraction tube with a little ether and add the washings to the flask.
10. Repeat twice extraction of the liquid remaining in the extraction tube using 15 ml of each solvent every time, add the ethereal extract to the same container and evaporate off completely.
11. Dry the flask in an air oven at 102 ± 2 °C for 2 h, cool in a desiccator and weigh.
12. Heat the flask again in the oven for 30 min. Cool in a desiccator and weigh. Repeat the process of heating and cooling and weighing until the difference between two successive weights does not exceed 1 mg.
13. Wash out the fat from the flask with petroleum ether carefully leaving any insoluble residue in the flask.
14. Dry the flask in the oven and reweigh. The difference in weights represents the weight of fat extracted from the milk.
15. Correct weight of extracted fat by blank determination on reagents used. Difference between duplicate determinations obtained simultaneously by the same analyst should not be more than 0.07 g fat/100g product.

Calculation with units of Expression

$$Fat\ \%\ (m/m) = \frac{(M1 - M2) - (M3 - M4)}{w} \times 100$$

Where,

M1 is the mass, in g, of the fat-collecting flask and extracted matter after drying

M2 is the mass, in g, of the empty fat-collecting flask

M3 is the mass, in g, of the fat-collecting flask used in the blank test after drying

M4 is the mass, in g, of the empty fat-collecting flask used in the blank test w is the weight of the sample in g

Annexure- IV (Lactometer method)

Determination of SNF (Solids-not-Fat) in Milk by the Use of the Lactometer:

Scope: This method prescribes the method for the determination of solids-not-fat in milk using the lactometer.

Apparatus: The following apparatus are required for conducting the test:

1. Lactometer with lactometer Jar conforming to IS : 9585-1980*
2. Thermometer - conforming to IS: 9585-1980*.

Method of Analysis:

The specific gravity of milk will vary with the duration and temperature of storage. This variation may be overcome by ensuring that the fat is completely in the liquid state before the specific gravity reading is taken This IS achieved by pre-warming the milk.

1. Warm the sample of milk to a temperature of 40 to 45°C and maintain the sample within this range for five minutes during which time the contents of the bottle are adequately mixed.
2. Care shall be taken to avoid the formation of air bubbles or froth when mixing the sample.
3. The sample is then water cooled to 27 ±2°C and held within this range until the specific gravity reading is taken.
4. The sample shall not be held for more than one hour.
5. The reading is then taken according to the following procedure.

1. The sample bottle is gently inverted two or three times.
2. The milk is then poured down the side of the lactometer jar so as to avoid the formation of air bubbles.
3. Sufficient milk shall be poured into the jar to ensure that some of it overflows when the lactometer is inserted.
4. The lactometer, held by the stem, IS inserted in the sample and released when it is approximately in its position of equilibrium thus avoiding wetting more than a very short length of the stem above the milk surface.
5. As soon as the lactometer is at rest, the scale reading corresponding to the top of the meniscus of the milk is noted.
6. The lactometer jar shall be vertical and the bulb of the lactometer shall not touch the side
7. It is advisable to repeat the reading after depressing the lactometer about 3 mm and allowing it to come to rest
8. Note the temperature of milk with the help of the thermometer.
9. Correct the observed lactometer readings at 27°C as per the fat percent ranges with the help of Table I.
10. The percent of solids-not-fat in milk is then calculated using the following formula:

SNF = (CLR /4) + 0.25F + 0.44
Where,
SNF =Solids-not-fat m milk,
CLR = Corrected lactometer reading at 27°C, and
F = Percent of fat content of milk

{It may he noted that the lactometer estimation of solids-not-fat in milk is for routine purposes and is only an estimate nearer to the gravimetric method. All the correction factors suggested in the formula are based on a long time study at different laboratories and fall within the range of error associated with the method. This may not be considered as a very precise method for the estimation of solids-not-Fat in milk. For precise estimation gravimetric method may be adopted or the results may he compared with the gravimetric method}.

Table I: Correction to be applied to lactometer readings taken at temperature other than 27°C to obtain corrected lactometer reading of milk at 27°C

ANNEXURE -V

Using Reference milk analyzer for determination of Fat and SNF

The Milk Inspector at the time of verification/ inspection of Dairy shall follow the procedure laid down as follows:

a. For the purpose of checking the Milk Analyzer used by Dairies, the Milk Inspector may follow control sample method or Reference milk analyzer carried by him.

b. The Milk inspector shall carry the Reference Milk Analyzer supplied by the Government.

c. The Milk Inspector at the place of inspection shall collect the samples from the producers and obtain the quality parameters like fat and SNF with the help of the Reference milk analyzer carried by him.

1. The Milk Inspector shall use the same sample for testing the milk analyzer used by the Dairies.

2. The Milk Inspector shall compare the results obtained from the Reference milk analyzer carried by him and the results obtained from the milk analyzer used by the Dairies.

3. If the results shown by the Milk Analyzer used by the Dairies vary by more than 0.2 when compared to the results obtained from the reference milk analyzer carried by the Milk Inspector shall be declared as non-standard milk analyzer and action shall be taken to register case for using a non-standard milk analyzer.

FORM NO - I

APPLICATION FOR GRANT OF LICENSE/RENEWAL FOR THE USE OF MILK ANALYZER (See Rule -4)

1) Type of Center ---------- Milk Procurement Center/BMCU/Dairy
2) Name and designation of the Applicant _____
3) Name and address of the Center _____
   Village/ward:
   Mandal:
   District:
   State:
   Phone No:
   Pin code:
4) Instrument used - Milk Analyzer/Electronic Milko Tester
5) Description of the instrument:

Make: _____
Model: _____
Serial Number: _____
Brand Name: _____
Year of Manufacture: _____

Payment Details:

Amount Paid in Rs. --------
Mode of payment -------

Declaration:

I/We ----------son(S)/daughter(s)/wife of ---------- residing at ----------here by declare that the information furnished above is true with best of my/our knowledge and belief. I am/We are fully aware that if it is found that the information furnished by me/us is false or there is any kind of deviation/violation of the conditions, the endorsement on license/ registration issued under AP Milk Procurement, Protection of Farmers Act, 2023 and Rules shall be cancelled.

Signature of the Applicant

Supporting Documents to be submitted:

1) Aadhaar Card 2) PAN Card 3) TIN No. 4) GST No. 5) OEM Manual

Conditions of License:

1. License certificate shall be displayed at office in a prominent place.
2. Licensee shall maintain the standards and comply the provisions specified in the Act and Rules.
3. The Milk Inspector will inspect the premises at any time and can test the Milk Analyzer
4. Licensee shall adhere to the specifications prescribed by the Original equipment Manufacturer (OEM).
5. The Licensee shall maintain the records and registers as specified in the Act and Rules.

FORM NO – II

Grant/Renewal of License for Milk Analyzer (See Rule -5)

License No. _____ Date of issue:_____

1) The Milk Analyzer No. ---------- of Dealer/Company ---------- operated in location ---------- belonging to ---------- Resident of ---------- is issued with license by Authorized Officer ---------- valid from _____ to _____ subject to the conditions overleaf under ---------- Act and Rules 2023.

Details of Milk Analyzer for which license is issued

1) Type of Center ---------- Milk Procurement Center/BMCU/Dairy
2) Name and designation of the Applicant _____
3) Name and address of the Center _____
Village/ward:
Mandal:
District:
State:
Phone No:
Pin code:
4) Instrument used - Milk Analyzer/Electronic Milko Tester
5) Description of the instrument:
Make: _____
Model: _____
Number: _____
Year of Manufacture: _____
Brand Name: _____
6) No. of Milk Analyzer's used _____
7) Validity from _____ to _____

Place:
Date:
Signature & Name of the Licensing Authority
(Seal of the Authority).

FORM NO – III

APPLICATION FOR GRANT OF LICENSE/ RENEWAL OF LICENSE FOR THE MANUFACTURER/ DEALER (See Rule -7)

1. Name and address of the Manufacturer/Dealer _____

Village/ward:
Mandal:
District:
State:
Phone No:
Pin code:

2. Instrument Manufactured - Milk Analyzer/Electronic Milko Tester
3. Description of the instrument:

Make: _____
Model: _____
Number: _____
Year of Manufacture: _____
Brand Name: _____

4. Any accreditations obtained:
5. Any approvals obtained:
6. Principal of operation:

Payment Details:

Amount Paid in Rs. --------
Mode of payment -------

Declaration:

I/We ----------son(S)/daughter(s)/wife of ---------- residing at ----------here by declare that the information furnished above is true with best of my/our knowledge and belief. I am/We are fully aware that if it is found that the information furnished by me/us is false or there is any kind of deviation/violation of the conditions, the endorsement on license/ registration issued under AP Milk Procurement, Protection of Farmers Act, 2023 and Rules shall be cancelled.

Signature of the Applicant

Supporting Documents to be submitted:

1) Aadhaar Card 2) PAN Card 3) TIN No. 4) GST No. 5) OEM Manual

Conditions of License:

Licensee shall maintain the standards and comply the provisions specified in the Act and Rules.

FORM NO – IV

License for MANUFACTURER/ DEALER (See Rule -7)

License No. _____ Date of issue:_____

The Manufacturer/Dealer ---------- operating in the state of Andhra Pradesh is issued a license by the Milk Commissioner/Authorized Officer with a life time validity.

Details of Manufacturer/ Dealer for whom license is issued

1. Name and address of the Manufacturer/Dealer _____
   Village/ward:
   Mandal:
   District:
   State:
   Phone No:
   Pin code:
2. Instrument Manufactured - Milk Analyzer/Electronic Milko Tester
3. Description of the instrument:

Make: _____
Model: _____
Number: _____
Year of Manufacture: _____
Brand Name: _____

4. Any accreditations obtained:
5. Any approvals obtained:
6. Principal of operation:

Place:
Date:
Signature & Name of the Licensing Authority
(Seal of the Authority).

FORM – V

(See Rule no.8)

SUSPENSION / CANCELLATION OF LICENSE

Ref. No. Date: .....

Sub:-Andhra Pradesh Milk Procurement (Protection of Farmers) Rules 2023-Suspense/ Cancellation of license under Rule No.8 of the Andhra Pradesh Milk Procurement (Protection of Farmers) Rules 2023-Regarding.

Ref:-1. Inspection report No Dated of Milk Inspector, (station)

2. Show cause Notice No. -------- dated ---------
3. Your Reply dated ----------

<<<>>>

Your reply dated ------- in response to the show cause notice has been examined with reference to the supporting documents furnished by you. Since Authorized officer has not satisfied with the reply and established the violations as stated in the Show cause notice, the license issued to Milk Analyzer vide License No.--------- dated---------- -is hereby cancelled / suspended .

The Licensee is at liberty to rectify the defects which led to the suspension of license and furnish his compliance so that the licensing authority shall examine and consider to revoke the suspension after satisfying with compliance.

AUTHORIZED OFFICER

Form No – VI
(See Rule no.8)

Show-cause Notice for Suspension/Cancellation of License

Notice No: Date:

Sub: AP Milk Procurement (Protection of Farmers) Rules 2023 – Show cause notice issued under Rule No.8 of the AP Andhra Pradesh Milk Procurement (Protection of Farmers) Rules 2023.

Ref: Inspection report No: ---------- Dated ---------- of Milk Inspector of --------- (station) along with enquiry report (if any) by the Milk Inspector, dated ----------.
As per the report received vide reference 1st cited above, the following violations of provisions under AP Milk Procurement (Protection of Farmers) Act and Rules are reported.

1.
2.
3.

Hence as per the provisions contained in Rule No.8 of AP Milk Procurement (Protection of Farmers) Rules 2023, you are informed to furnish your explanation on the above violations with supporting documents/evidences within 10 days from the date receipt of this notice, as why an order should not be passed by the undersigned for issuing order for suspension/cancellation/imposing penalty/seizure/order for prosecutions against your unit/Dairy.

Further, your are informed that failure to show cause and submit your explanation in writing within period mentioned above, will be construed that you have no explanation to offer for the above violations and action deemed fit will be taken as per the provisions of the AP Milk Procurement (Protection of Farmers) Rules 2023 without any further intimation/notice in this matter.
You are requested to acknowledge the receipt of this show cause notice.

Signature of Authorized officer with Seal

APPLICATION FOR VERIFICATION / REVERIFICATION OF MILK ANALYSER

FORM NO VII
(See Rule -9)

1) Type of Center ---------- Milk Procurement Center/BMCU/Dairy
2) Name and designation of the Applicant _____
3) License No of the Milk Analyzer.
4) Applying for Verification / Reverification
5) Payment details

Signature of the Applicant
Supporting Documents to be submitted:

1. License of the Milk Analyzer
2. Previous verification certificate (in case of re-verification)

FORM NO -VIII
(See Rule – 9 (ix)

VERIFICATION CERTIFICATE)

It is to certified that the Milk Analyzer bearing No. ---------- of make _____, manufactured by_____ used by MPC /BMCU/Dairy ---------- located at ---------- Village of ---------- (M), ---------- District is verified and found to be in conformity with the standards of The AP Milk Procurement, Protection of Farmers Act, 2023 and Rules made there under & this certificate is valid up to ---------- from the date of its issue.

Date:

Signature & Name of the Milk Inspector
(Seal of the Authority).

FORM NO –IX
(See Rule – 12)

Requisition form to Food Safety Authority

From
Milk Inspector

To
Assistant Food Controller,
----------District

Sir/Madam,

I have this day in the premises of M/s _____ situated at (address) on suspicion of Milk to be adulterated here by request you to proceed further under the provisions of Food Safety & Standards Act, 2006, Rules & Regulations made there under.

Type of Milk:- ---------- (Buffalo/Cow)
Parameters to be tested
As per FSSAI Standards for Milk
Place ----------
Date ----------
Signature & Name of the Milk Inspector
(Seal of the Authority)

Acknowledgement
Assistant Food Controller / Assistant Food Safety Officer.

FORM NO –X
(See Rule 13)

ACKNOWLEDGEMENT RECEIPT TO FARMER

Date:
Place:

Name of the Milk procurement center/Society/Dairy:
Shift: Morning/Evening
Time of the procurement:
Type of the Milk:
Name of the farmer:
Farmer code:
No of Liters:
Fat percentage:
SNF percentage:
Rate/liter:
Amount to farmer:

FORM NO –XI
(See Rule -13)

ACKNOWLEDGEMENT CARD/BOOK TO FARMER

Name of the Society:
Name of the Village:
Name of the Farmer:
Farmer code:

Date	Shift	Type of Milk (Buffalo/Cow)	No of Litres	Fat percentage	SNF percentage	Amount/litre	Total amount

Form-XII
(See Rule -14)

Complaint form for the Milk pourer when amount paid is less than the amount shown in receipt/card

From,
(Name and Address of the Milk pourer)

To,
The Milk Inspector,
---------- (Village & Mandal)
---------- District
Sir/Madam,

Sub: Andhra Pradesh Milk Procurement (Protection of farmers) Rules 2023- Action to be taken on the Milk procurement center/Dairy- for not paying the same amount as shown in the receipt – Req- Reg.

Ref: Milk Pouring receipt & Bank statement of either farmer/society to be attached.

*****

I hereby submit that, the ---------- Milk procurement Center of ---------- Dairy of ---------- village, ---------- (M), ---------- District has been paying less amount than the amount given on the receipt and the difference is ---------- Rupees when compared to that of Receipt since ------ months. Hence I request you to take the necessary action in this regard.
Enclosures: supporting documents

Signature of the Milk pourer

Form-XIII
(See Rule No-24)

Return of Goods to Person In-Charge of Dairy

1. Name of the Milk Procurement Center/Dairy :
2. Address:
3. Name of the Milk Pourer:
4. Quantity of Milk Poured (in litres):
5. Weight of the Milk poured (in kg):
6. Violations recorded:

1.
2.
3.

The Milk procured by the above mentioned Milk Procurement Center/Dairy from the above mentioned farmer during the visit of the concerned Milk inspector is weighed, recorded in the presence of Milk inspector and returned to the Dairy itself.

Witness 1:

Witness 2 :

In-charge of Dairy **Signature & Seal of Milk Inspector**

FORM – XIV
(See Rule no-32)

APPEAL TO THE APPELLATE AUTHORITY ON THE ORDER PASSED BY ANY OFFICER

From:

(Name and address of the Appellant with contact number)

To,
The Appellant Authority
AP Milk Procurement (Protection of Farmers) Act

Sir/Madam,

I/We, respectfully state that, the Licensing Authority,----------District has rejected for Issued orders for suspension / cancellation of License/ seizure/ forfeiture of our Milk Analyzer of our Dairy ----------(Details of the Unit) located at-------(V)------- (M) -------District by stating the following grounds vide his Lr. No.-------(Ref. No. of Licensing Authority)

1)

2)

Aggrieved by the aforesaid grounds of the Licensing Authority, I/ we hereby appeal to your kind self to examine the my/our explanation along with supporting documents enclosed herewith and consider to issue orders to Licensing Authority to revoke suspension /cancellation of License/ Registration / revoke forfeiture / seizure of equipment imposed by the licensing authority.

Encl: Detailed explanation along with supporting documents

Place:

Date:

Signature of the Appellate

GOPAL KRISHNA DWIVEDI
SPECIAL CHIEF SECRETARY TO GOVERNMENT (FAC)